

*Abstract Page*

522,128

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
29 January 2004 (29.01.2004)

PCT

(10) International Publication Number  
**WO 2004/009665 A2**

(51) International Patent Classification<sup>7</sup>: C08G HARMS, Guido [DE/DE]; Jacksted 3, 26409 Wittmund (DE).

(21) International Application Number: PCT/US2003/022771 (74) Agents: REITER, Stephen, E. et al.; Foley & Lardner, P.O. Box 80278, San Diego, CA 92138-0278 (US).

(22) International Filing Date: 18 July 2003 (18.07.2003)

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/397,319 19 July 2002 (19.07.2002) US

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:  
US 60/397,319 (CON)  
Filed on 19 July 2002 (19.07.2002)

Published:  
— without international search report and to be republished upon receipt of that report

(71) Applicant (*for all designated States except US*): THE REGENTS OF THE UNIVERSITY OF CALIFORNIA [US/US]; 9500 Gilman Drive, La Jolla, CA 92093-0910 (US).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): GOODMAN, Murray [US/US]; 9760 Blackgold Road, La Jolla, CA 92037 (US). SEONG, Churl, Min [KR/KR]; Expo. Apt. 402-1033, Junmin-dong, Yusong, Taejon 305-761 (KR).

WO 2004/009665 A2

(54) Title: DENDRIMERS AS MOLECULAR TRANSLOCATORS

(57) Abstract: Transport molecules include a dendrimer and a biologically active molecule. The dendrimer of such transport molecules includes at least one guanidine group, at least one protonated guanidine group, at least one protected guanidine group, at least one amidine group, at least one protonated amidine group, at least one protected amidine group, at least one ureido group, at least one protonated ureido group, at least one protected ureido group, at least one thioureido group, at least one protonated thioureido group, or at least one protected thioureido group. The biologically active molecule is bonded to the dendrimer. A method of increasing the bioavailability of a drug includes bonding the drug to a dendrimer of the invention.